

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L3	116	( ((enlarge\$3 resize\$3 (re adj siz\$3) increas\$3 expand\$3 broaden\$3 add\$3 augment\$5 expansion maximize maximum amplify magnif\$8) with pattern with (lin\$3 margin thin fine width\$3 spac\$3 densit\$3 feature)) ) and ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical with (correct\$3 effect\$3))) ) and ( (first primary initial) near4 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((second trim\$4 (multi adj phase near transistion)) near4 mask) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 09:22
L4	6	( ((enlarg\$3 resize\$3 (re adj siz\$3) increas\$3 augment\$5 expansion amplif\$3 magnif\$8) with pattern with (lin\$3 margin thin fine width\$3 spac\$3 densit\$3 feature)) ) and ( (first primary initial) near2 (photomask (photo adj (mask reticle)) mask reticle) same (opc (optical with (correct\$3 effect\$3))) same ((proximity near5 (effect\$3 correct\$4)) or ope or ppc ) and ( ((second trim\$4 (multi adj phase near transistion)) near2 mask) same (opc (optical with (correct\$3 effect\$3))) same ((proximity near5 (effect\$3 correct\$4)) or ope or ppc) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 09:38
L5	0	"6710847".pn. and (trim)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 09:39

## EAST Search History

L6	2	( ((enlarg\$3 resizing\$3 size\$3 (re adj size\$3) increase\$3 augment\$5 expansion amplif\$3 magnif\$8) with pattern with (lin\$3 margin correct\$3 thin fine width\$3 space\$3 densit\$3 feature cd (critical near dimension))) ) and ( (first primary initial) near2 (photomask (photo adj (mask reticle)) mask reticle) same (opc (optical with (correct\$3 effect\$3))) same ((proximity near5 (effect\$3 correct\$4)) or ope or ppc) ) and ( ((trim\$4 (multi adj phase near transistion)) near2 mask) same (opc (optical with (correct\$3 effect\$3))) same ((proximity near5 (effect\$3 correct\$4)) or ope or ppc) ) and ( (reduc\$5 decrease\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 space\$3) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 09:50
L7	2	( ((enlarg\$3 resizing\$3 size\$3 (re adj size\$3) increase\$3 augment\$5 expansion amplif\$3 magnif\$8) with (lin\$3 margin correct\$3 thin fine width\$3 space\$3 densit\$3 feature cd (critical near dimension))) ) and ( (first primary initial) near2 (photomask (photo adj (mask reticle)) mask reticle) same (opc (optical with (correct\$3 effect\$3))) same ((proximity near5 (effect\$3 correct\$4)) or ope or ppc) ) and ( (second trim\$4 (multi adj phase near transistion)) near2 mask) same (opc (optical with (correct\$3 effect\$3))) same ((proximity near5 (effect\$3 correct\$4)) or ope or ppc) same (window opaque\$3 ) ) and ( (reduc\$5 decrease\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 space\$3) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 10:10
L8	113	opc with enlarg\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 10:11

## EAST Search History

L9	31	opc with enlarg\$3 and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 10:30
L10	1	"6710847".pn. and (proximit\$3 with (correct\$3 effect))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 10:31
L11	1	"6710847".pn. and (optical with (correct\$3 effect))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 10:47
L12	191	((enlarg\$3 resiz\$3 (re adj siz\$3) increas\$3 augment\$5 expansion maximize maximum amplify\$8 magnif\$8) with (lin\$3 margin cd (critical near3 (dimension measurement features)) thin fine width\$3 spac\$3 densit\$3 feature)) ) and ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical with (correct\$3 effect\$3))) ) and ( (first primary initial) near4 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((second trim\$4 (multi adj phase near transistion)) near4 mask) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3 cd (critical near3 (dimension\$3 measurement feature)) ) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 10:49

## EAST Search History

L13	179	( ((enlarg\$3 resiz\$3 (re adj siz\$3) increas\$3 augment\$5 amplify\$8 magnif\$8) with (lin\$3 margin cd (critical near3 (dimension measurement features)) thin fine width\$3 spac\$3 densit\$3 feature)) ) and ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical with (correct\$3 effect\$3))) ) and ( (first primary initial) near4 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((second trim\$4 (multi adj phase near transistion)) near4 mask) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3 cd (critical near3 (dimension\$3 measurement feature)) ) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 10:49
L14	179	( ((enlarg\$3 resiz\$3 (re adj siz\$3) increas\$3 amplify\$8 magnif\$8) with (lin\$3 margin cd (critical near (dimension measurement features)) thin fine width\$3 spac\$3 densit\$3 feature)) ) and ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical with (correct\$3 effect\$3))) ) and ( (first primary initial) near4 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((second trim\$4 (multi adj phase near transistion)) near4 mask) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3 cd (critical near3 (dimension\$3 measurement feature)) ) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 10:50

## EAST Search History

L15	160	( ((enlarg\$3 resiz\$3 (re adj siz\$3) increas\$3 amplify\$8 magnif\$8) with (lin\$3 margin cd (critical near (dimension measurement features)) thin fine width\$3 spac\$3 densit\$3 feature)) ) and ( (proximity near2 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical near2 (correct\$3 effect\$3))) ) and ( (first primary initial) near4 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((second trim\$4 (multi adj phase near transistion)) near4 mask) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3 cd (critical near3 (dimension\$3 measurement feature)) ) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 10:50
L16	117	( ((enlarg\$3 resiz\$3 (re adj siz\$3) increas\$3 amplify\$8 magnif\$8) with (lin\$3 margin cd (critical near (dimension measurement features)) thin fine width\$3 spac\$3 densit\$3 feature)) ) and ( (proximity near2 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical near2 (correct\$3 effect\$3))) ) and ( (first primary initial) near2 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((second trim\$4 (multi adj phase near transistion)) near2 mask) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3 cd (critical near3 (dimension\$3 measurement feature)) ) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 10:51

## EAST Search History

L17	99	( ((enlarg\$3 resizing\$3 (re adj siz\$3) increas\$3 amplify\$8 magnif\$8) near5 (lin\$3 margin cd (critical near (dimension measurement features)) thin fine width\$3 spac\$3 densit\$3 feature)) ) and ( (proximity near2 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical near2 (correct\$3 effect\$3))) ) and ( (first primary initial) near2 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((second trim\$4 (multi adj phase near transistion)) near2 mask) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3 cd (critical near3 (dimension\$3 measurement feature)) ) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 10:51
L18	83	( ((enlarg\$3 resizing\$3 (re adj siz\$3) increas\$3 amplify\$8 magnif\$8) near5 (lin\$3 margin cd (critical near (dimension measurement features)) thin fine width\$3 spac\$3 densit\$3 feature)) ) and ( (proximity near2 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical near2 (correct\$3 effect\$3))) ) and ( (first primary initial) near2 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((second trim\$4 (multi adj phase near transistion)) near2 mask) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) near5 (width pitch densit\$3 spac\$3 cd (critical near3 (dimension\$3 measurement feature)) ) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 10:52

## EAST Search History

L19	21	( ((enlarg\$3 resizing\$3 (re adj siz\$3) increas\$3 amplify\$8 magnif\$8) near5 (lin\$3 margin cd (critical near (dimension measurement features)) thin fine width\$3 spac\$3 densit\$3 feature)) ) and ( (proximity near2 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical near2 (correct\$3 effect\$3))) ) and ( (first primary initial) near2 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((trim\$4 (multi adj phase near transistion)) near2 mask) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) near5 (width pitch densit\$3 spac\$3 cd (critical near3 (dimension\$3 measurement feature)) ) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 10:55
L20	177	( ((enlarg\$3 increas\$3 augment\$5 amplify\$8 magnif\$8) with (lin\$3 margin cd (critical near3 (dimension measurement features)) thin fine width\$3 spac\$3 densit\$3 feature)) ) and ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical with (correct\$3 effect\$3))) ) and ( (first primary initial) near4 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((second trim\$4 (multi adj phase near transistion)) near4 mask) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3 cd (critical near3 (dimension\$3 measurement feature)) ) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 10:55

## EAST Search History

L21	148	( ((enlarg\$3 increas\$3 augment\$5 amplify\$8 magnif\$8) near5 (lin\$3 margin cd (critical near3 (dimension measurement features)) thin fine width\$3 spac\$3 densit\$3 feature)) ) and ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical with (correct\$3 effect\$3))) ) and ( (first primary initial) near4 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((second trim\$4 (multi adj phase near transistion)) near4 mask) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3 cd (critical near3 (dimension\$3 measurement feature)) ) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 10:55
L22	122	( ((enlarg\$3 increas\$3 augment\$5 amplify\$8 magnif\$8) near5 (lin\$3 pattern margin cd (critical near3 (dimension measurement features)) thin fine width\$3 spac\$3 densit\$3 feature)) ) and ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical with (correct\$3 effect\$3))) ) and ( (first primary initial) near2 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((second trim\$4 (multi adj phase near transistion)) near2 mask) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3 cd (critical near3 (dimension\$3 measurement feature)) ) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 10:56



## EAST Search History

L23	118	( ((enlarg\$3 increas\$3 augment\$5 amplify\$8 magnif\$8) near5 (lin\$3 pattern margin cd (critical near3 (dimension measurement features)) thin fine width\$3 spac\$3 densit\$3 feature)) ) and ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical with (correct\$3 effect\$3))) ) and ( (first primary initial) near2 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((second trim\$4 (multi adj phase near transistion)) near2 mask) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3 ) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 10:56
L24	111	( ((enlarg\$3 increas\$3 amplif\$8 magnif\$8) near5 (lin\$3 pattern margin "cd" (critical near (dimension measurement features)) thin fine width\$3 spac\$3 feature)) ) and ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical with (correct\$3 effect\$3))) ) and ( (first primary initial) near2 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((second trim\$4 (multi adj phase near transistion)) near2 mask) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3 ) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 10:59

## EAST Search History

L25	23864041	( ((enlarg\$3 increas\$3 amplif\$8 magnif\$8) near5 (lin\$3 pattern margin "cd" (critical near (dimension measurement features)) thin fine width\$3 spac\$3 feature)) ) and ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical with (correct\$3 effect\$3))) ) and ( (first primary initial) near2 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((second trim\$4 (multi adj phase near transistion)) near2 mask) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3 ) ) and ( ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) same (photomask (photo adj (mask reticle)) mask reticle) ) and ( (photomask (photo adj (mask reticle)) mask reticle) same ( (opc (optical with (correct\$3 effect\$3))) ) ) @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 11:00
L26	90	( ((enlarg\$3 increas\$3 amplif\$8 magnif\$8) near5 (lin\$3 pattern margin "cd" (critical near (dimension measurement features)) thin fine width\$3 spac\$3 feature)) ) and ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical with (correct\$3 effect\$3))) ) and ( (first primary initial) near2 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((second trim\$4 (multi adj phase near transistion)) near2 mask) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3 ) ) and ( ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) same (photomask (photo adj (mask reticle)) mask reticle) ) and ( (photomask (photo adj (mask reticle)) mask reticle) same ( (opc (optical with (correct\$3 effect\$3))) ) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 11:01

## EAST Search History

L27	25	( ((enlarg\$3 increas\$3 amplif\$8 magnif\$8) near5 (lin\$3 pattern margin "cd" (critical near (dimension measurement features)) thin fine width\$3 spac\$3 feature)) same (rule guideline constraints parameter predetermined (guide adj line) specification requirements conditions) ) and ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical with (correct\$3 effect\$3))) ) and ( (first primary initial) near2 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((second trim\$4 (multi adj phase near transistion)) near2 mask) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3 ) ) and ( ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) same (photomask (photo adj (mask reticle)) mask reticle) ) and ( (photomask (photo adj (mask reticle)) mask reticle) same ( (opc (optical with (correct\$3 effect\$3))) ) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 11:06
-----	----	---	---	----	----	------------------

## EAST Search History

L28	3	( ((enlarg\$3 increas\$3 amplif\$8 magnif\$8) near5 (lin\$3 pattern margin "cd" (critical near (dimension measurement features)) thin fine width\$3 spac\$3 feature)) same (rule guideline constraints parameter predetermined (guide adj line) specification requirements conditions) ) and ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical with (correct\$3 effect\$3))) ) and ( (first primary initial) near2 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((complementary trim\$4 (multi adj phase near transistion)) near2 mask) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3 ) ) and ( ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) same (photomask (photo adj (mask reticle)) mask reticle) ) and ( (photomask (photo adj (mask reticle)) mask reticle) same ( (opc (optical with (correct\$3 effect\$3))) ) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 11:10
-----	---	--	---	----	----	------------------

## EAST Search History

L29	25	( ((enlarg\$3 resiz\$3 (siz\$3 near2 (fix\$3 correct\$3)) increas\$3 amplif\$8 magnif\$8) near5 (lin\$3 pattern margin "cd" (critical near (dimension measurement features)) thin fine width\$3 spac\$3 feature)) same (rule guideline constraints parameter predetermined (guide adj line) specification requirements conditions) ) and ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical with (correct\$3 effect\$3))) ) and ( (first primary initial) near2 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((second complementary trim\$4 (multi adj phase near transistion)) near2 mask) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3 ) ) and ( ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) same (photomask (photo adj (mask reticle)) mask reticle) ) and ( (photomask (photo adj (mask reticle)) mask reticle) same ( (opc (optical with (correct\$3 effect\$3))) ) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 11:18
-----	----	---	---	----	----	------------------

## EAST Search History

L30	3	( ((enlarg\$3 resizing\$3 (size\$3 near2 (fix\$3 correct\$3)) increase\$3 amplify\$8 magnify\$8) near5 (line\$3 pattern margin "cd" (critical near (dimension measurement features)) thin fine width\$3 spacing\$3 feature)) same (rule guideline constraints parameter predetermined (guide adj line) specification requirements conditions) ) and ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical with (correct\$3 effect\$3))) ) and ( (first primary initial) near2 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((complementary trim\$4 (multi adj phase near transistion)) near2 mask) ) and ( (reduce\$5 decrease\$3 shrink\$3 diminish\$3 lessen\$3 truncate\$5 cutback) with (width pitch density\$3 spacing\$3 ) ) and ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) same (photomask (photo adj (mask reticle)) mask reticle) ) and ( (photomask (photo adj (mask reticle)) mask reticle) same ( (opc (optical with (correct\$3 effect\$3))) ) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 11:19
-----	---	--	---	----	----	------------------

## EAST Search History

L31	5	( ((enlarg\$3 resiz\$3 (siz\$3 near2 (fix\$3 correct\$3)) increas\$3 amplif\$8 magnif\$8) near5 (lin\$3 pattern margin "cd" (critical near (dimension measurement features)) thin fine width\$3 spac\$3 feature)) same (rule guideline constraints parameter predetermined (guide adj line) specification requirements conditions) ) and ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical with (correct\$3 effect\$3))) ) and ( (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((complementary trim\$4 (multi adj phase near transistion)) near2 mask) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3 ) ) and ( ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) same (photomask (photo adj (mask reticle)) mask reticle) ) and ( (photomask (photo adj (mask reticle)) mask reticle) same ( (opc (optical with (correct\$3 effect\$3))) ) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 11:33
L32	36	( ((enlarg\$3 resiz\$3 (siz\$3 near2 (fix\$3 correct\$3)) increas\$3 amplif\$8 magnif\$8) near5 (lin\$3 pattern layout margin "cd" (critical near (dimension measurement features)) thin fine width\$3 spac\$3 feature)) ) and ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) and ( (opc (optical with (correct\$3 effect\$3))) ) and ( (first primary initial) near2 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((complementary trim\$4 (multi adj phase near transistion)) near2 mask) ) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3 ) ) and ( ( (proximity near5 (effect\$3 correct\$4)) or ope or ppc ) same (photomask (photo adj (mask reticle)) mask reticle) ) and ( (photomask (photo adj (mask reticle)) mask reticle) same ( (opc (optical with (correct\$3 effect\$3))) ) ) and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 13:37

## EAST Search History

L33	2	"20040248045"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 14:27
L34	2	"20040248045" and (minimum with (spac\$3 pitch\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 14:27
L35	1	"20030106037" and (minimum with (spac\$3 pitch\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 14:35
L36	0	"20030106037" and (reduc\$4 with (spac\$3 pitch\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 14:36
L37	0	"20030106037" and (decrease with (spac\$3 pitch\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 16:37
L38	1	"20020160281" and (decrease with (spac\$3 pitch\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 16:37
L39	0	"20020160281" and trim	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 16:38
L40	1	"20020160281" and mask	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 16:46



## EAST Search History

L41	0	"20030106037" and (estimat\$3 calculat\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 16:46
L42	0	"20030106037" and (determin)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 16:46
L43	0	"20030106037" and (determin\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 16:46
L44	0	"20030106037" and complementary	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 16:46
L45	1	"20030106037" and align\$5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 16:52
L46	1	"20030106037" and (minimum with width)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 16:52
S1	528	(prepar\$3 produc\$3 construc\$4 develop\$5 provid\$4 forming formation form generat\$3 build\$3 contriv\$3 fabricat\$5 creat\$3) with mask with data with transfer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 11:55
S2	2	S1 and 716/? .ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 11:59

## EAST Search History

S3	1	"20040248045" and transfer	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 12:04
S4	30	(prepar\$3 produc\$3 construc\$4 develop\$5 provid\$4 generat\$3 build\$3 contriv\$3 fabricat\$5 creat\$3) with mask with data with transfer and 430/?ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 12:06
S5	23	S4 and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 14:56
S6	1	S5 and window	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 15:00
S7	2	"20040248045" and (window)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 14:56
S8	40	window with expos\$5 and 716/? ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 15:00
S9	121	window with expos\$5 and 716/19. ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 15:03
S10	140	window near4 (mask reticle) and "716"/\$2.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 15:38

## EAST Search History

S11	221	lithography near margin	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 15:36
S12	36	window near4 (mask reticle) with (expos\$6) and "716"/\$2.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 15:42
S13	24	window near4 (pattern) with (expos\$6) and "716"/\$2.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 15:48
S14	2	(prepar\$3 produc\$3 construc\$4 develop\$5 provid\$4 form formation forming formed generat\$3 build\$3 contriv\$3 fabricat\$5 creat\$3) near5 ( ((mask pattern exposure reticle) near data) ) and ( ((mask pattern exposure reticle) near data) with (resiz\$3 enlarg\$3 (re adj siz\$3)) ) and (opc (optical with proximity with correction)) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) near5 width with pattern )	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 16:03
S15	2	( ((mask pattern exposure reticle) near data) ) and ( ((mask pattern exposure reticle) near data) with (resiz\$3 enlarg\$3 (re adj siz\$3)) ) and (opc (optical with proximity with correction)) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) near5 width with pattern )	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 16:04
S16	17	( ((mask pattern exposure reticle) near data) ) and ( ((pattern exposure ) ) with (resiz\$3 enlarg\$3 (re adj siz\$3)) ) and (opc (optical with proximity with correction)) and ( (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) near5 width with pattern )	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 16:35

## EAST Search History

S17	63	resiz\$3 with ((mask pattern exposure reticle) near data)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 17:00
S18	411	mask near data near process\$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 17:00
S19	292	mask near data near process\$4 and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 17:03
S20	2	(mask adj data) and "20040248045"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 17:16
S21	2	align\$5 and "20040248045"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 17:32
S22	144	( (((mask pattern exposure reticle) near data) or pattern) with (resiz\$3 enlarg\$3 increas\$3 magnif\$8 larg\$3) ) and (pattern with (transfer\$5 expos\$5)) and (first with (mask reticle) with (width densit\$3 pitch spac\$3)) and ( second with (mask reticle) with (correspond\$5 align\$5 equivalen\$3 complementary matching) with (first with (mask reticle)) ) and (pattern with (rules specification constraint margin guideline (guide adj line)))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 17:37
S23	119	S22 and @ad<"20040325"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 17:38

## EAST Search History

S24	103	S22 and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 17:38
S25	21	S24 and (opc or (proximity near correct\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 17:39
S26	81	( (((mask pattern exposure reticle) near data) or pattern) with (resiz\$3 enlarg\$3 increas\$3 magnif\$8 larg\$3) ) and (pattern with (transfer\$5 expos\$5)) and (first with (mask reticle) with (width densit\$3 pitch spac\$3)) and ( second with (mask reticle) with (correspond\$5 align\$5 equivalen\$3 complementary matching) with (first with (mask reticle)) ) and (pattern with (rules specification constraint margin guideline (guide adj line))) and (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 17:40
S27	66	S26 and @ad<"20040325"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 17:41
S28	59	S26 and @ad<"20030326"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 17:42
S29	10	S28 and (opc or (proximity near correct\$3))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 17:42

## EAST Search History

S30	21	( (((mask pattern photomask (phot adj mask) exposure reticle) near data) or pattern) with (resiz\$3 enlarg\$3 increas\$3 magnif\$8 larg\$3) ) and (pattern with (transfer\$5 expos\$5)) and (first with (\$5mask (photo adj (mask reticle)) reticle) with (width densit\$3 pitch spac\$3)) and ( second with (\$5mask (photo adj (mask reticle)) reticle) with (correspond\$5 align\$5 equivalen\$3 complementary matching) with (first with (\$5mask (photo adj (mask reticle)) reticle)) ) and (pattern with (rules specification constraint margin guideline (guide adj line))) and (reduc\$5 decreas\$3 shrink\$3 diminish\$3 lessen\$3 truncat\$5 cutback) with (width pitch densit\$3 spac\$3) and (opc or (proximit\$3 near correct\$3) ret (enhancement with technique) (resolution with enhancement) )	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 17:48
S31	15	S30 and @ad<"20040325"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 18:22
S32	9658	(mask reticle) near set	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 18:23
S33	1	"20040248045" and enlarging	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 18:26
S34	1	"20040248045" and (enlarg\$3 increas\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 18:28

## EAST Search History

S35	50736	( (((mask pattern photomask (phot adj mask) exposure reticle) near data) or pattern) same (resiz\$3 enlarg\$3 increas\$3 magnif\$8 larg\$3) with (width spac\$3 pitch\$3) )	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 18:29
S36	23506	( (((mask pattern photomask (phot adj mask) exposure reticle) near data) or pattern) with (resiz\$3 enlarg\$3 increas\$3 magnif\$8 larg\$3) with (width spac\$3 pitch\$3) )	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 18:29
S37	2083	( (((mask pattern photomask (phot adj mask) exposure reticle) near data) or pattern) with (resiz\$3 enlarg\$3 increas\$3 magnif\$8 larg\$3) with (width spac\$3 pitch\$3) ) and @ad<"20030326" and ("716"/\$2.ccls. "430"/\$4.ccls. "355"/\$4.ccls. "235"/\$4.ccls.)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 18:33
S38	22844	(resiz\$3 enlarg\$3 increas\$3 larg\$3) with (width spac\$3 pitch\$3) with pattern	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 18:37
S39	434	(resiz\$3 enlarg\$3 increas\$3 larg\$3) with (width spac\$3 pitch\$3) with pattern same (\$5mask (photo adj (mask reticle)) reticle) with (first initial primary) same (trim second\$3) with (\$5mask (photo adj (mask reticle)) reticle)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 18:38
S40	239	(resiz\$3 enlarg\$3 increas\$3 larg\$3) with (width spac\$3 pitch\$3) with pattern same (\$5mask (photo adj (mask reticle)) reticle) near5 (first initial primary) same (trim second\$3) near5 (\$5mask (photo adj (mask reticle)) reticle)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 18:39
S41	13	S40 and "716"/\$2.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 18:40

## EAST Search History

S42	3053	pattern with distribut\$3 with (mask reticle)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 18:40
S43	85	pattern near distribut\$3 near (mask reticle)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 19:05
S46	62	pattern same (resiz\$3 with (value quantity number))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 19:49
S47	289	(enlarge\$3 resizing\$3 (re adj sizing\$3) increase\$3 expand\$3 broaden\$3 add\$3 augment\$5 expansion maximize maximum amplify) with pattern with (line\$3 margin thin fine width\$3 spacing\$3 density\$3 feature) and ( (first primary initial) near4 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((second trim\$4 (multi adj phase near transistion)) near4 mask) ) and ( (opc ope ret ppc (proximity near2 (correction effect)) (resolution near2 enhancement)) ) and ( (line\$3 with (spacing\$3 density\$3 width)) same pattern )	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 19:54
S48	98	( ((enlarge\$3 resizing\$3 (re adj sizing\$3) increase\$3 expand\$3 broaden\$3 add\$3 augment\$5 expansion maximize maximum amplify) with pattern with (line\$3 margin thin fine width\$3 spacing\$3 density\$3 feature)) same (rule guideline constraints predetermined (guide adj line) specification requirements conditions) ) and ( (first primary initial) near4 (photomask (photo adj (mask reticle)) mask reticle) ) and ( ((second trim\$4 (multi adj phase near transistion)) near4 mask) ) and ( (opc ope ret ppc (proximity near2 (correction effect)) (resolution near2 enhancement)) ) and ( (line\$3 with (spacing\$3 density\$3 width)) same pattern )	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/04 19:55



## EAST Search History

S49	75	S48 and @ad<"20040325"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/05 09:17
-----	----	------------------------	---	----	----	------------------